

In the Claims

1-12 (Canceled)

13 (Currently amended). A pharmaceutical composition comprising:

~~a natriuretic hormone peptide (NHP); or a nucleic acid sequence encoding NHP; a natriuretic hormone peptide, or a biologically active portion of the natriuretic hormone peptide, wherein the natriuretic hormone peptide comprises a Glycine at the amino terminus position of the peptide, and~~
an operably linked promoter sequence; and a pharmaceutically acceptable carrier.

Claim 14 (Canceled).

Claim 15 (Currently amended). The pharmaceutical composition of claim 13, wherein ~~said composition comprises said nucleic acid sequence encoding NHP and said operably linked promoter sequence, and wherein said NHP~~ the natriuretic hormone peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, comprising SEQ ID NO:5 and SEQ ID NO:6, or a biologically active fragment or homolog of any of the foregoing.

16-19 (Canceled).

20 (Currently amended). An expression vector comprising:

a nucleic acid sequence encoding a natriuretic hormone peptide ~~(NHP)~~ comprising a biologically active portion of an amino acid sequence comprising the amino acid sequence of SEQ ID NO:5, SEQ ID NO:6, or a homolog of SEQ ID NO:6; and an operably linked promoter sequence.

21 (Currently amended). The expression vector of claim 20, wherein ~~said NHP~~ the natriuretic hormone peptide comprises an amino acid sequence ~~selected from the group consisting of comprising SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6, or a biologically active fragment or homolog of any of the foregoing~~

22 (Canceled).

23 (Currently amended). An isolated cell comprising ~~genetically modified with a nucleic acid sequence encoding a natriuretic hormone peptide, (NHP) the peptide comprising a biologically active portion of an amino acid sequence comprising the amino acid sequence of SEQ ID NO:5, SEQ ID NO:6, or a homolog of SEQ ID NO:6, and an operably linked promoter sequence.~~

24 (Currently amended). The isolated cell of claim 23, wherein ~~said NHP~~ the natriuretic hormone peptide comprises an amino acid sequence ~~selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO: 5 and comprising SEQ ID NO:6, or a biologically active fragment or homolog of any of the foregoing~~

25 (Currently amended). An isolated nucleic acid sequence encoding a biologically active portion of an amino acid sequence consisting essentially of: SEQ ID NO:5, ~~or~~ SEQ ID NO:6, ~~or encoding a biologically active fragment or a homolog of SEQ ID NO:5 or SEQ ID NO:6.~~

26 (Canceled).

27 (Currently amended). The pharmaceutical composition of claim 13, wherein ~~said nucleic acid sequence encodes a natriuretic hormone peptide comprising an amino acid sequence comprising SEQ ID NO: 5, or a biologically active fragment or homolog of SEQ ID NO: 5, and the operably linked promoter sequence~~ further comprising a chitosan.

28 (Currently amended). An expression vector comprising: a nucleic acid sequence encoding a natriuretic hormone peptide, or a biologically active portion of the natriuretic hormone peptide, wherein the natriuretic hormone peptide comprises a Glycine at the amino terminus position of the peptide ~~an amino acid sequence comprising SEQ ID No: 5, or a biologically active fragment or homolog of SEQ ID No: 5~~ and an operably linked promoter sequence.

29 (Currently amended). An isolated cell ~~genetically modified with~~ comprising a nucleic acid sequence encoding a natriuretic hormone peptide ~~comprising, or a biologically active portion of the natriuretic hormone peptide, wherein the natriuretic hormone peptide comprises a Glycine at the amino terminus position of the peptide~~ an amino acid sequence comprising SEQ ID No: 5, or a biologically active fragment or homolog of SEQ ID No: 5 and an operably linked promoter sequence.

30 (Currently amended). An isolated nucleic acid sequence encoding a natriuretic hormone peptide, or a biologically active portion of the natriuretic hormone peptide, wherein the natriuretic hormone peptide comprises a Glycine at the amino terminus position of the peptide ~~an amino acid sequence consisting essentially of SEQ ID NO: 5, or encoding a biologically active fragment or homolog of SEQ ID NO: 5.~~

Claims 31-42 (Canceled).

43 (New). The pharmaceutical composition of claim 13, further comprising a liposome.

44 (New). The expression vector of claim 28, wherein the natriuretic hormone peptide comprises an amino acid sequence comprising SEQ ID NO:5.

45 (New). The expression vector of claim 44, wherein the expression vector is a DNA plasmid.

46 (New). The isolated cell of claim 29, wherein the nucleic acid sequence encodes the natriuretic hormone peptide comprising an amino acid sequence comprising SEQ ID NO:5.

47 (New). The isolated nucleic acid sequence of claim 30, wherein the natriuretic hormone peptide consists essentially of the amino acid sequence of SEQ ID NO:5.

48 (new). The pharmaceutical composition according to claim 13, wherein the natriuretic hormone peptide consists of the amino acid sequence of SEQ ID NO:5.

49 (New). The expression vector according to claim 28, wherein the natriuretic hormone peptide consists of the amino acid sequence of SEQ ID NO:5.

50 (New). The isolated cell according to claim 29, wherein the natriuretic hormone peptide consists of the amino acid sequence of SEQ ID NO:5.

51 (New). The isolated nucleic acid sequence according to claim 30, wherein the natriuretic hormone peptide consists of the amino acid sequence of SEQ ID NO:5.

52 (New). The pharmaceutical composition according to claim 13, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:12 or SEQ ID NO:18.

53 (New). The expression vector according to claim 20, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:18, or SEQ ID NO:19.

54 (New). The isolated cell according to claim 23, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:18, or SEQ ID NO:19.

55 (New). The isolated nucleic acid sequence according to claim 25, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:18, or SEQ ID NO:19.

56 (New). The expression vector according to claim 28, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:12 or SEQ ID NO:18.

57 (New). The isolated cell according to claim 29, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:12 or SEQ ID NO:18.

58 (New). The isolated nucleic acid sequence according to claim 30, wherein the nucleic acid comprises the nucleotide sequence of SEQ ID NO:12 or SEQ ID NO:18.